

IN THE CLAIMS

Please amend the following claims.

1. (currently amended) A chemical-mechanical polishing slurry for a copper based metal layer on a semiconductor substrate, the chemical-mechanical polishing slurry comprising:
- a liquid;
 - ~~cerium ions as an oxidizer in the liquid, the oxidizer comprising a complex double salt of cerium the cerium ions being in a quantity equal to the inclusion of at least 0.02 molar ammonium cerium nitrate in the liquid;~~
 - an abrasive in the liquid, the liquid, the complex double salt of cerium ~~cerium ions~~ and the abrasive together having a first pH value;
 - a pH increasing glycine substance in the liquid that increases the first pH value to a second pH value above 1.5 and below 3.0; and
 - an anti-oxidizing BTA agent.
2. (currently amended) The slurry of claim 1 wherein the complex double salt of cerium comprises ammonium cerium nitrate ((NH₄)₂Ce(NO₃)₆) ~~comprising cerium ions in quantity equal to the inclusion of between 0.05 molar and 0.1 molar of ammonium cerium nitrate.~~
3. (currently amended) The slurry of claim 2 wherein a concentration of ammonium cerium nitrate is at least 0.02 molar in the liquid ~~comprising between 1 percent and 30 percent abrasive by weight.~~
4. (original) The slurry of claim 1 wherein the abrasive is silica.
5. (previously presented) The slurry of claim 1 wherein the second pH value is at least 2.5.
6. (cancelled)
7. (currently amended) The slurry of claim 2 wherein a concentration of ammonium cerium nitrate is between 0.05 molar and 0.1 molar in the liquid ~~which is environmentally green.~~

8. (cancelled)

9. (cancelled)

10-11. (cancelled)

7 12. (currently amended) The slurry of claim ~~[[11]]~~ 1 comprising between 0.00200 molar and 0.00500 molar BTA.

8 13. (currently amended) The slurry of claim 1 wherein the complex double salt of cerium comprises ammonium cerium sulfate $(\text{NH}_4)_4\text{Ce}(\text{SO}_4)_4 \cdot 2\text{H}_2\text{O}$ ~~comprising cerium ions in quantity equal to between 0.02 molar and 0.1 molar ammonium cerium nitrate and BTA comprising between 0.00200 and 0.00500 molar BTA.~~

9 14. (original) The slurry of claim 13 wherein the second pH value is at least 2.5.

15-25 (cancelled)

10 26. (currently amended) A chemical-mechanical polishing slurry for polishing a copper based metal, the chemical-mechanical polishing slurry comprising:

a liquid;

an oxidizer comprising a complex double salt of cerium ~~cerium ions in a quantity equal to the inclusion of at least 0.02 molar ammonium cerium nitrate in the liquid;~~

an abrasive in the liquid;

benzotriazole (BTA) in the liquid to inhibit corrosion; and

a glycine complexing agent in the liquid and to increase a pH value of the slurry to above 1.5 and below 3.0.

11 27. (original) The slurry of claim 26, comprising between 0.00100 molar and 0.00500 molar benzotriazole (BTA).

12 28. (original) The slurry of claim 26, comprising between 1 and 3 percent glycine by weight.

13 29. (original) The slurry of claim 26, wherein the liquid is deionized liquid water.